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<213> Homo sapiens

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gacctgtgac tgccattaca actgtccggg agacaatgac atctttgaat cgctgtacta 660
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cggaaatctg tcattagac tgacacagct gtggcaagtg aatttgctgt taacaagcca 1260
gattttttaa aatttatatt gtaaatattt tgtgtgtgtg tgtgtgtgta tatatatata 1320
tatgtacagt latctaagtt aatttaaagt tgtttgtgcc tttttatatt tgtttttaat 1380

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gctttgatat ttcaatqgta gcntcaattt ctgaacacca taggtagaat gtaaagcttg 1440
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gtgactctat atagclgac agttttttca cctggaagca ttgttttcta ctttgatatg 1680
actgtttttc ggcacagttta tttgttgaga gtgtgaccaa aagttacatg tttgcacctt 1740
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1819

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<210> 21
<211> 2294
<212> DNA
<213> Homo sapiens

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<400> 21
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ccgaccaccg ccagcgctcc agggcccgcc gctccccgct cgcgcgcaac gcgcctcccg 180
ctccgcccgc agtgccaaac atgaccgcog ccagtatggg ccccgctccg gtgccttcg 240
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tgtgcaccgc caaagatggt gctccctgca tcttcgggtg tacggtgtac cgcagcggag 540
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tgccctctgt cagcatggac gttcgtctgc ccagccctga ctgccccttc ccgagcttac 660
cgactggaag acacgttttg cccagaccca actatgatta gagccaactg cctgggtccag 720
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ccaagcctat caagtthgag ctttctgggt gcaccagcat gaagacatac cgagctaaat 960
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gtgctgccc ttacactgt ccggagaca atgacatctt tgaatcgctg tactacagga 1140
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aactacatth gtacacagca ccagaatgta tattaagggt tggctttagg agcagtggga 1440
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tttaaaattt atattgtaaa tattgtgtgt gtgtatatat atatatatgt 1800
acagttatct aagtttaatt aaagtgtgtt gtgccttttt atttttgttt ttaatgcttt 1860
gatatttcaa tgttagcctc aatttctgaa cccataggt agaattgaaa gcttgtctga 1920
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tctatataac tgatcagttt ttccacttgg aagcatttgt ttctactttg atatgactgt 2160
ttttcgaca gtttatttgt tgagagtgtg accaaaagtt acatgtttgc accttctag 2220
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tagtaggcgg cagc

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2294

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<210> 22
<211> 594
<212> DNA
<213> Homo sapiens

```

<400> 22

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tgaatatgg agaagagtct tagatgtgtt tgggtaccca agctggcttt tgtactcttc 60
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gcactgcgct tctctcaga acctctgat gccgtcaca tgcggggagg aaatgtcctc 180
ctcgactgct ccgcggaatc cgaccgagga gttccagtga tcaagtggaa gaaagatgca 240
ttcatctggc cttgggaatg gatgaaagga agcagcaact ttcaaattgg tctctgctga 300
tacaatacat acttcattcc agacaccaca agccagatga gggactttac caatgtgagg 360
catctttagg agattctggc tcaattatta gtccgacagc aaaagttgca gtagcaggtc 420
ctacttagtc tagtctcctc ttggaagact gatcagaata actcattttc atcaataaca 480
ggacaattgg gcagaatcac cactccttca tgcactctcc tagtgagggt ctgagaaagt 540
tgaatatctg aagatgtgat ttgttcagggt ggtgctataa agaattacat ctca 594

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<210> 23

<211> 881

<212> DNA

<213> Homo sapiens

<400> 23

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cttatacnag cgttatgaga tcaagngac caagatgtat aaagggttcc aagccttang 60
ggatgccgct gacatccggt tctgtacac ccccgccatg gagagtgtct gcggatactt 120
ccacaggtcc cacaaccgca gcagaggagt ttctcattgc tggaaaactg caggatggac 180
tcttgacat cactacctgc agtttctgtg ctccctggaa cagcctgagc ttagctcagc 240
gccggggctt caccaagacc tacaactgtt gctgtgagga atgcaagggc gaattccagc 300
acactggggc ccgttactag tggatccgag ctccgtacca agcttgatgc atagcttgag 360
tattctatag tgtcacctaa atagottggc gtaatcatgg tcatagctgt ttctgtgtg 420
aaattgttat ccgttcacaa ttccacacaa cataccgagc ggaagcataa agtgtaaagc 480
ctgggggtgc taatgagtga gctaaactcac attaatggc ttgcgctcac tgcctgcttt 540
ccagtccggg aacctgtcgt gccagctgca ttaattgaat gcccaacgcy cggggagagg 600
cgggttgctt attggcgct ctccgcttc ctgcgtcact gactcgtcgc gctcggctgt 660
tcngctgctg ccagcgggtat cagctcactc aaangcggta atccggttn cacagaatca 720
ggggataacg cagaagaac atgtgagcaa aaggcagcaa aahggcagga accgnaaaag 780
gcgngttntg cgttcttct aagctccgc ccctgacnag catncaaant tnacgctcag 840
tanagggggg aaccgncag acttaaaant ccagcgttcc c 881

```

<210> 24

<211> 893

<212> DNA

<213> Homo sapiens

<400> 24

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cttatacnag cgttatgaga tcaagngac caaggtatcc cctgcccccg cctctttccc 60
agcattttct aacatcttcc tcttggtcaa aacagaaact tctggccact ggttggtgag 120
agaaagtgg ctgtgatctt gggatcctat atgacttcag ggaagaacct ggagtggag 180
gattatgtcg gtaaaagaga cauttccct catccatcaa cagatgtata aagggttcca 240
agccttaggg gatgcgctg acatccggtt cgtctacacc ccgccatgg agagtgtctg 300
cggatacttc cacaggtccc acaaccgcag cgaggagttt ctcatctgt gtgaggcacc 360
gtccccgcgc cctgtgccac accaaccagt cctggggcg cgccctagca accacgagg 420
ggcgaggctc tgatgggaat ggtcccact gaaatgggga ccaccccaat ttcagtctat 480
cagaaggccg ggcttttggc agcttggcag ctccagcaat cacaagctgc ttgtcgggtc 540
ccgccccgc cttctcttca ggaaaactgc aggatggact cttgcacatc actacctgca 600
gttttgtggc tccctggaa agcctgagct tagctcagcg ccggggcttc accaagacct 660
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gatccnagct cggnccaagc ttgatgcata gcttgagtat tctatagtgn cactaaata 780
gcttggtgta tcatgggcat agctgttct gnggaaatng ntatccgtna caattccnca 840
cacatnncan ccggaagnta aagngnaagc ctgggtgcna tgagngacta ctn 893

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<210> 25

<211> 887
 <212> DNA
 <213> Homo sapiens

<400> 25
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 tggaggcctg tgggtttccgc acccgctgcc acccccgccc ctacgctgga catttatcct 120
 ctacgctca ggccttccgc ccatcgccgc agatccagcg ccagagaga caccagagaa 180
 cccaccatgg cccctttga gccctgggt tctggcatcc tgttgttgc gtggctgata 240
 gcccacagca gggcctgcac ctgtgtccca ccccaccac agacggcctt ctgcaattcc 300
 gacctgctca tcagggccaa gttcgtgggg acaccagaag tcaaccagac caccctatac 360
 cagcgttatg agatcaagat gaccaagatg tataaagggt tccaagcctt aggggatgcc 420
 gctgacatcc ggttcctcta ccccccgcc atggagagtg tctgaggata cttccacagg 480
 atggactctt gcacatcact acctgcagtt tctgtggctc ctggaacagc ctgagcttag 540
 ctacggcgcg gggcttcacc aagacctaca ctgttggctg tgaggaatgc acagtgtttc 600
 cctgtttatc catccctgc aaactgcaga gtggcactca ttgcttgtgg acggaccagc 660
 tccctcaagg ccttgaaaag ggcttcaggt cccgtcactc tgccctgcctg cctcgggagc 720
 cagggctgtg caccctggcag tccctgcgtt cccagatagc ctgaatcctg cccggagtg 780
 aagctgaagc ctgcacagtg tccacctgt tccactccc atctttcttc cggacaatga 840
 aataaagagt taaccaacca acccaataaa actgatgtta ctagcca 887

<210> 26
 <211> 814
 <212> DNA
 <213> Homo sapiens

<400> 26
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 ctacgctca ggccttccgc ccatcgccgc agatccagcg ccagagaga caccagattc 180
 tgcaattccg acctcgtcat cagggccaaag tctgtgggga caccagaagt caaccagacc 240
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 ttccacaggt cccacnaccg cagcagaggag tttctcattg ctggaactgc gcaggatgga 420
 ctcttgcaca tcaactacct cagtttcgtg gctccctgga acagcctgag cttagctcag 480
 cgcgggggtg tcaaccaagac ctacactgtt ggctgtgagg aatgcacagt gtttccctgt 540
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 caaggctctg aaaagggtt ccagtcctgt cacttgcctt gcctgcctcg ggagccaggg 660
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<210> 27
 <211> 481
 <212> PRT
 <213> Homo sapiens

<400> 27
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 Ser Leu Met Val Leu Val Ala Ile Gly Thr Ala Val Thr Ala Ala Val
 20 25 30
 Asn Pro Gly Val Val Val Arg Ile Ser Gln Lys Gly Leu Asp Tyr Ala
 35 40 45
 Ser Gln Gln Gly Thr Ala Ala Leu Gln Lys Glu Leu Lys Arg Ile Lys
 50 55 60

Ile Pro Asp Tyr Ser Asp Ser Phe Lys Ile Lys His Leu Gly Lys Gly
 65 70 75 80
 His Tyr Ser Phe Tyr Ser Met Asp Ile Arg Glu Phe Gln Leu Pro Ser
 85 90 95
 Ser Gln Ile Ser Met Val Pro Asn Val Gly Leu Lys Phe Ser Ile Ser
 100 105 110
 Asn Ala Asn Ile Lys Ile Ser Gly Lys Trp Lys Ala Gln Lys Arg Phe
 115 120 125
 Leu Lys Met Ser Gly Asn Phe Asp Leu Ser Ile Glu Gly Met Ser Ile
 130 135 140
 Ser Ala Asp Leu Lys Leu Gly Ser Asn Pro Thr Ser Gly Lys Pro Thr
 145 150 155 160
 Ile Thr Cys Ser Ser Cys Ser Ser His Ile Asn Ser Val His Val His
 165 170 175
 Ile Ser Lys Ser Lys Val Gly Trp Leu Ile Gln Leu Phe His Lys Lys
 180 185 190
 Ile Glu Ser Ala Leu Arg Asn Lys Met Asn Ser Gln Val Cys Glu Lys
 195 200 205
 Val Thr Asn Ser Val Ser Ser Lys Leu Gln Pro Tyr Phe Gln Thr Leu
 210 215 220
 Pro Val Met Thr Lys Ile Asp Ser Val Ala Gly Ile Asn Tyr Gly Leu
 225 230 235 240
 Val Ala Pro Pro Ala Thr Thr Ala Glu Thr Leu Asp Val Gln Met Lys
 245 250 255
 Gly Glu Phe Tyr Ser Glu Asn His His Asn Pro Pro Pro Phe Ala Pro
 260 265 270
 Pro Val Met Glu Phe Pro Ala Ala His Asp Arg Met Val Tyr Leu Gly
 275 280 285
 Leu Ser Asp Tyr Phe Phe Asn Thr Ala Gly Leu Val Tyr Gln Glu Ala
 290 295 300
 Gly Val Leu Lys Met Thr Leu Arg Asp Asp Met Ile Pro Lys Glu Ser
 305 310 315 320
 Lys Phe Arg Leu Thr Thr Lys Phe Phe Gly Thr Phe Leu Pro Glu Val
 325 330 335
 Ala Lys Lys Phe Pro Asn Met Lys Ile Gln Ile His Val Ser Ala Ser
 340 345 350
 Thr Pro Pro His Leu Ser Val Gln Pro Thr Gly Leu Thr Phe Tyr Pro
 355 360 365
 Ala Val Asp Val Gln Ala Phe Ala Val Leu Pro Asn Ser Ser Leu Ala
 370 375 380

Ser Leu Phe Leu Ile Gly Met Gly Lys Gln Phe Leu Gly Trp Thr Asp
385 390 395 400

Glu Glu Pro Gln Thr Val Pro Thr Ala Leu Ser Leu Glu Ser Gly Asp
405 410 415

His Val Asn Pro Val Trp Ile Gln Thr Trp Thr Val Ser Leu Arg Ser
420 425 430

Leu Arg Leu Glu Ser Leu Tyr Ser Met Val Pro Thr Pro Gly Gly Ile
435 440 445

His Ser Pro Ser His Ser Leu Val Arg Leu Phe Thr Tyr Ser Phe Asn
450 455 460

Tyr Ser Phe Ser Gln Phe Leu Ile His Ser Xaa Ile His Ser Met Leu
465 470 475 480

Ala

<210> 28

<211> 628

<212> PRT

<213> Homo sapiens

<400> 28

Met Gly Arg Leu Gln Leu Val Val Leu Gly Leu Thr Cys Cys Trp Ala
1 5 10 15

Val Ala Ser Ala Ala Lys Leu Gly Ala Val Tyr Thr Glu Gly Gly Phe
20 25 30

Val Glu Gly Val Asn Lys Lys Leu Gly Leu Leu Gly Asp Ser Val Asp
35 40 45

Ile Phe Lys Gly Ile Pro Phe Ala Ala Pro Thr Lys Ala Leu Glu Asn
50 55 60

Pro Gln Pro His Pro Gly Trp Gln Gly Thr Leu Lys Ala Lys Asn Phe
65 70 75 80

Lys Lys Arg Cys Leu Gln Ala Thr Ile Thr Gln Asp Ser Thr Tyr Gly
85 90 95

Asp Glu Asp Cys Leu Tyr Leu Asn Ile Trp Val Pro Gln Gly Arg Lys
100 105 110

Gln Val Ser Arg Asp Leu Pro Val Met Ile Trp Ile Tyr Gly Gly Ala
115 120 125

Phe Leu Met Gly Ser Gly His Gly Ala Asn Phe Leu Asn Asn Tyr Leu
130 135 140

Tyr Asp Gly Glu Glu Ile Ala Thr Arg Gly Asn Val Ile Val Val Thr
145 150 155 160

Phe Asn Tyr Arg Val Gly Pro Leu Gly Phe Leu Ser Thr Gly Asp Ala
165 170 175

Asn Leu Pro Gly Asn Tyr Gly Leu Arg Asp Gln His Met Ala Ile Ala
 180 185 190
 Trp Val Lys Arg Asn Ile Ala Ala Phe Gly Gly Asp Pro Asn Asn Ile
 195 200 205
 Thr Leu Phe Gly Glu Ser Ala Gly Gly Ala Ser Val Ser Leu Gln Thr
 210 215 220
 Leu Ser Pro Tyr Asn Lys Gly Leu Ile Arg Arg Ala Ile Ser Gln Ser
 225 230 235 240
 Gly Val Ala Leu Ser Pro Trp Val Ile Gln Lys Asn Pro Leu Phe Trp
 245 250 255
 Ala Lys Lys Val Ala Glu Lys Val Gly Cys Pro Val Gly Asp Ala Ala
 260 265 270
 Arg Met Ala Gln Cys Leu Lys Val Thr Asp Pro Arg Ala Leu Thr Leu
 275 280 285
 Ala Tyr Lys Val Pro Leu Ala Gly Leu Glu Tyr Pro Met Leu His Tyr
 290 295 300
 Val Gly Phe Val Pro Val Ile Asp Gly Asp Phe Ile Pro Ala Asp Pro
 305 310 315 320
 Ile Asn Leu Tyr Ala Asn Ala Ala Asp Ile Asp Tyr Ile Ala Gly Thr
 325 330 335
 Asn Asn Met Asp Gly His Ile Phe Ala Ser Ile Asp Met Pro Ala Ile
 340 345 350
 Asn Lys Gly Asn Lys Lys Val Thr Glu Glu Asp Phe Tyr Lys Leu Val
 355 360 365
 Ser Glu Phe Thr Ile Thr Lys Gly Leu Arg Gly Ala Lys Thr Thr Phe
 370 375 380
 Asp Val Tyr Thr Glu Ser Trp Ala Gln Asp Pro Ser Gln Glu Asn Lys
 385 390 395 400
 Lys Lys Thr Val Val Asp Phe Glu Thr Asp Val Leu Phe Leu Val Pro
 405 410 415
 Thr Glu Ile Ala Leu Ala Gln His Arg Ala Asn Ala Lys Ser Ala Lys
 420 425 430
 Thr Tyr Ala Tyr Leu Phe Ser His Pro Ser Arg Met Pro Val Tyr Pro
 435 440 445
 Lys Trp Val Gly Ala Asp His Ala Asp Asp Ile Gln Tyr Val Phe Gly
 450 455 460
 Lys Pro Phe Ala Thr Pro Thr Gly Tyr Arg Pro Gln Asp Arg Thr Val
 465 470 475 480
 Ser Lys Ala Met Ile Ala Tyr Trp Thr Asn Phe Ala Lys Thr Gly Asp
 485 490 495
 Pro Asn Met Gly Asp Ser Ala Val Pro Thr His Trp Glu Pro Tyr Thr

500 505 510
 Thr Glu Asn Ser Gly Tyr Leu Glu Ile Thr Lys Lys Met Gly Ser Ser
 515 520 525
 Ser Met Lys Arg Ser Leu Arg Thr Asn Phe Leu Arg Tyr Trp Thr Leu
 530 535 540
 Thr Tyr Leu Ala Leu Pro Thr Val Thr Asp Gln Glu Ala Thr Pro Val
 545 550 555 560
 Pro Pro Thr Gly Asp Ser Glu Ala Thr Pro Val Pro Pro Thr Gly Asp
 565 570 575
 Ser Glu Thr Ala Pro Val Pro Pro Thr Gly Asp Ser Gly Ala Pro Pro
 580 585 590
 Val Pro Pro Thr Gly Asp Ser Gly Ala Pro Pro Val Pro Pro Thr Gly
 595 600 605
 Asp Ser Gly Ala Pro Pro Val Pro Pro Thr Gly Asp Ser Glu Ala Arg
 610 615 620
 Ala His Leu Gly
 625

 <210> 29
 <211> 641
 <212> PRT
 <213> Homo sapiens

 <400> 29
 Leu Leu Leu Leu Gly Phe Leu Leu Val Ser Leu Glu Ser Thr Leu Ser
 1 5 10 15
 Ile Pro Pro Trp Glu Ala Pro Lys Glu His Lys Tyr Lys Ala Glu Glu
 20 25 30
 His Thr Val Val Leu Thr Val Thr Gly Glu Pro Cys His Phe Pro Phe
 35 40 45
 Gln Tyr His Arg Gln Leu Tyr His Lys Cys Thr His Lys Gly Arg Pro
 50 55 60
 Gly Pro Gln Pro Trp Cys Ala Thr Thr Pro Asn Phe Asp Gln Asp Gln
 65 70 75 80
 Arg Trp Gly Tyr Cys Leu Glu Pro Lys Lys Val Lys Asp His Cys Ser
 85 90 95
 Lys His Ser Pro Cys Gln Lys Gly Gly Thr Cys Val Asn Met Pro Ser
 100 105 110
 Gly Pro His Cys Leu Cys Pro Gln His Leu Thr Gly Asn His Cys Gln
 115 120 125
 Lys Glu Lys Cys Phe Glu Pro Gln Leu Leu Arg Phe Phe His Lys Asn
 130 135 140
 Glu Ile Trp Tyr Arg Thr Glu Gln Ala Ala Val Ala Arg Cys Gln Cys

145	150	155	160
Lys Gly Pro Asp Ala His Cys Gln Arg Leu Ala Ser Gln Ala Cys Arg	165	170	175
Thr Asn Pro Cys Leu His Gly Gly Arg Cys Leu Glu Val Glu Gly His	180	185	190
Arg Leu Cys His Cys Pro Val Gly Tyr Thr Gly Pro Phe Cys Asp Val	195	200	205
Asp Thr Lys Ala Ser Cys Tyr Asp Gly Arg Gly Leu Ser Tyr Arg Gly	210	215	220
Leu Ala Arg Thr Thr Leu Ser Gly Ala Pro Cys Gln Pro Trp Ala Ser	225	230	235
Glu Ala Thr Tyr Arg Asn Val Thr Ala Glu Gln Ala Arg Asn Trp Gly	240	245	250
Leu Gly Gly His Ala Phe Cys Arg Asn Pro Asp Asn Asp Ile Arg Pro	255	260	265
Trp Cys Phe Val Leu Asn Arg Asp Arg Leu Ser Trp Glu Tyr Cys Asp	270	275	280
Leu Ala Gln Cys Gln Thr Pro Thr Gln Ala Ala Pro Pro Thr Pro Val	285	290	295
Ser Pro Arg Leu His Val Pro Leu Met Pro Ala Gln Pro Ala Pro Pro	300	305	310
Lys Pro Gln Pro Thr Thr Arg Thr Pro Pro Gln Ser Gln Thr Pro Gly	315	320	325
Ala Leu Pro Ala Lys Arg Glu Gln Pro Pro Ser Leu Thr Arg Asn Gly	330	335	340
Pro Leu Ser Cys Gly Gln Arg Leu Arg Lys Ser Leu Ser Ser Met Thr	345	350	355
Arg Val Val Gly Gly Leu Val Ala Leu Arg Gly Ala His Pro Tyr Ile	360	365	370
Ala Ala Leu Tyr Trp Gly His Ser Phe Cys Ala Gly Ser Leu Ile Ala	375	380	385
Pro Cys Trp Val Leu Thr Ala Ala His Cys Leu Gln Asp Arg Pro Ala	390	395	400
Pro Glu Asp Leu Thr Val Val Leu Gly Gln Glu Arg Arg Asn His Ser	405	410	415
Cys Glu Pro Cys Gln Thr Leu Ala Val Arg Ser Tyr Arg Leu His Glu	420	425	430
Ala Phe Ser Pro Val Ser Tyr Gln His Asp Leu Ala Leu Leu Arg Leu	435	440	445
Gln Glu Asp Ala Asp Gly Ser Cys Ala Leu Leu Ser Pro Tyr Val Gln	450	455	460
	465	470	475
			480

Pro Val Cys Leu Pro Ser Gly Ala Ala Arg Pro Ser Glu Thr Thr Leu
485 490 495

Cys Gln Val Ala Gly Trp Gly His Gln Phe Glu Gly Ala Glu Glu Tyr
500 505 510

Ala Ser Phe Leu Gln Glu Ala Gln Val Pro Phe Leu Ser Leu Glu Arg
515 520 525

Cys Ser Ala Pro Asp Val His Gly Ser Ser Ile Leu Pro Gly Met Leu
530 535 540

Cys Ala Gly Phe Leu Glu Gly Gly Thr Asp Ala Cys Ala Gly Glu Leu
545 550 555 560

Leu Ala Gly Trp Arg Pro Ser Pro Arg Pro Ser Ala Xaa Ser Gln Val
565 570 575

His Ser Ala Asp Cys Val Phe Pro Thr Gln Gly Asp Ser Gly Gly Pro
580 585 590

Leu Val Cys Glu Asp Gln Ala Ala Glu Arg Arg Leu Thr Leu Gln Gly
595 600 605

Ile Ile Ser Trp Gly Ser Gly Cys Gly Asp Arg Asn Lys Pro Gly Val
610 615 620

Tyr Thr Asp Val Ala Tyr Tyr Leu Ala Trp Ile Arg Glu His Thr Val
625 630 635 640

Ser

<210> 30

<211> 164

<212> PRT

<213> Homo sapiens

<400> 30

Met Ala Pro Phe Glu Pro Leu Ala Ser Gly Ile Leu Leu Leu Trp
1 5 10 15

Leu Ile Ala Pro Ser Arg Ala Cys Thr Cys Val Pro Pro His Pro Gln
20 25 30

Thr Ala Phe Cys Asn Ser Asp Leu Val Ile Arg Ala Lys Phe Val Gly
35 40 45

Thr Pro Glu Val Asn Gln Thr Thr Leu Tyr Gln Arg Tyr Glu Ile Lys
50 55 60

Met Thr Lys Met Tyr Lys Gly Phe Gln Ala Leu Gly Asp Ala Ala Asp
65 70 75 80

Ile Arg Phe Val Tyr Thr Pro Ala Met Glu Ser Val Cys Gly Tyr Phe
85 90 95

His Arg Ser His Asn Arg Ser Glu Glu Phe Leu Ile Ala Gly Lys Leu
100 105 110

Gln Asp Gly Leu Leu His Ile Thr Thr Cys Ser Phe Val Ala Pro Trp
115 120 125

Asn Ser Leu Ser Leu Ala Gln Arg Arg Gly Phe Thr Lys Thr Tyr Thr
130 135 140

Val Gly Cys Glu Glu Cys Thr Val Phe Pro Cys Ser His Ser His Leu
145 150 155 160

Ser Ser Gly Gln

<210> 31

<211> 123

<212> PRT

<213> Homo sapiens

<400> 31

Met Ala Pro Phe Glu Pro Leu Ala Ser Gly Ile Leu Leu Leu Leu Trp
1 5 10 15

Leu Ile Ala Pro Ser Arg Ala Cys Thr Cys Val Pro Pro His Pro Gln
20 25 30

Thr Ala Phe Cys Asn Ser Asp Leu Val Ile Arg Ala Lys Phe Val Gly
35 40 45

Thr Pro Glu Val Asn Gln Thr Thr Leu Tyr Gln Arg Tyr Glu Ile Lys
50 55 60

Met Thr Lys Met Tyr Lys Gly Phe Gln Ala Leu Gly Asp Ala Ala Asp
65 70 75 80

Ile Arg Phe Val Tyr Thr Pro Ala Met Glu Ser Val Cys Gly Tyr Phe
85 90 95

His Arg Ser His Asn Arg Ser Glu Glu Phe Leu Ile Ala Gly Lys Leu
100 105 110

Gln Val Val Met Cys Lys Ser Pro Ser Val Val
115 120

<210> 32

<211> 211

<212> PRT

<213> Homo sapiens

<400> 32

Met Ala Pro Phe Glu Pro Leu Ala Ser Gly Ile Leu Leu Leu Leu Trp
1 5 10 15

Leu Ile Ala Pro Ser Arg Ala Cys Thr Cys Val Pro Pro His Pro Gln
20 25 30

Thr Ala Phe Cys Asn Ser Asp Leu Val Ile Arg Ala Lys Phe Val Gly
35 40 45

Thr Pro Glu Val Asn Gln Thr Thr Leu Tyr Gln Arg Tyr Glu Ile Lys

50 55 60
 Met Thr Lys Met Tyr Lys Gly Phe Gln Ala Leu Gly Asp Ala Ala Asp
 65 70 75 80
 Ile Arg Phe Val Tyr Thr Pro Ala Met Glu Ser Val Cys Gly Tyr Phe
 85 90 95
 His Arg Ser His Asn Arg Ser Glu Glu Phe Leu Ile Leu Leu Gly Lys
 100 105 110
 Leu Gln Asp Gly Ile Phe Ala His Ser Leu Thr Cys Ser Phe Cys Trp
 115 120 125
 Val Pro Trp Glu Asn Ser Leu Ser Leu Ala Gln Arg Arg Gly Phe Thr
 130 135 140
 Lys Thr Tyr Thr Val Gly Cys Glu Glu Cys Thr Val Phe Pro Cys Leu
 145 150 155 160
 Ser Ile Pro Cys Lys Leu Gln Ser Gly Thr His Cys Leu Trp Thr Asp
 165 170 175
 Gln Leu Leu Gln Gly Ser Glu Lys Gly Phe Gln Ser Arg His Leu Ala
 180 185 190
 Cys Leu Pro Arg Glu Pro Gly Leu Cys Thr Trp Gln Ser Leu Arg Ser
 195 200 205
 Gln Ile Ala
 210

<210> 33
 <211> 160
 <212> PRT
 <213> Homo sapiens

<400> 33
 Met Ala Pro Phe Glu Pro Leu Ala Ser Gly Ile Leu Leu Leu Leu Trp
 1 5 10 15
 Leu Ile Ala Pro Ser Arg Ala Cys Thr Cys Val Pro Pro His Pro Gln
 20 25 30
 Thr Ala Phe Cys Asn Ser Asp Leu Val Ile Arg Ala Lys Phe Val Gly
 35 40 45
 Thr Pro Glu Val Asn Gln Thr Thr Leu Tyr Gln Arg Tyr Glu Ile Lys
 50 55 60
 Met Thr Lys Met Tyr Lys Gly Phe Gln Ala Leu Gly Asp Ala Ala Asp
 65 70 75 80
 Ile Arg Phe Val Tyr Thr Pro Ala Met Glu Ser Val Cys Gly Tyr Phe
 85 90 95
 His Arg Ser His Asn Arg Ser Glu Glu Phe Leu Ile Leu Ser Ile Pro
 100 105 110
 Cys Lys Leu Gln Ser Gly Thr His Cys Leu Trp Thr Asp Gln Leu Leu

115 120 125
 Gln Gly Ser Gln Lys Gly Phe Gln Ser Arg His Leu Ala Cys Leu Pro
 130 135 140
 Arg Glu Pro Gly Leu Cys Thr Trp Gln Ser Leu Arg Ser Gln Ile Ala
 145 150 155 160

<210> 34
 <211> 197
 <212> PRT
 <213> Homo sapiens

<400> 34
 Met Ala Pro Phe Glu Pro Leu Ala Ser Gly Ile Leu Leu Leu Trp
 1 5 10 15
 Leu Ile Ala Pro Ser Arg Ala Cys Thr Cys Val Pro Pro His Pro Gln
 20 25 30
 Thr Ala Phe Cys Asn Ser Asp Leu Val Ile Arg Ala Lys Phe Val Gly
 35 40 45
 Thr Pro Glu Val Asn Gln Thr Thr Leu Tyr Gln Arg Tyr Glu Ile Lys
 50 55 60
 Met Thr Lys Met Tyr Lys Gly Phe Gln Ala Leu Gly Asp Ala Ala Asp
 65 70 75 80
 Ile Arg Phe Val Tyr Thr Pro Ala Met Glu Ser Val Cys Gly Tyr Phe
 85 90 95
 His Arg Ala Gly Lys Leu Gln Asp Gly Leu Leu His Ile Thr Thr Cys
 100 105 110
 Ser Phe Val Ala Pro Trp Asn Ser Leu Ser Leu Ala Gln Arg Arg Gly
 115 120 125
 Phe Thr Lys Thr Tyr Thr Val Gly Cys Glu Glu Cys Thr Val Phe Pro
 130 135 140
 Cys Leu Ser Ile Pro Cys Lys Leu Gln Ser Gly Thr His Cys Leu Trp
 145 150 155 160
 Thr Asp Gln Leu Leu Gln Gly Ser Glu Lys Gly Phe Gln Ser Arg His
 165 170 175
 Leu Ala Cys Leu Pro Arg Glu Pro Gly Leu Cys Thr Trp Gln Ser Leu
 180 185 190
 Arg Ser Gln Ile Ala
 195

<210> 35
 <211> 494
 <212> PRT

<213> Homo sapiens

<400> 35

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Met Arg Ala Leu Leu Ala Arg Leu Leu Leu Cys Val Leu Val Val Ser
 1           5           10           15

Asp Ser Lys Gly Ser Asn Glu Leu His Gln Val Pro Ser Asn Cys Asp
      20           25           30

Cys Leu Asn Gly Gly Thr Cys Val Ser Asn Lys Tyr Phe Ser Asn Ile
      35           40           45

His Trp Cys Asn Cys Pro Lys Lys Phe Gly Gly Gln His Cys Glu Ile
      50           55           60

Asp Lys Ser Lys Thr Cys Tyr Glu Gly Asn Gly His Phe Tyr Arg Gly
      65           70           75           80

Lys Ala Ser Thr Asp Thr Met Gly Arg Pro Cys Leu Pro Trp Asn Ser
      85           90           95

Ala Thr Val Leu Gln Gln Thr Tyr His Ala His Arg Ser Asp Ala Leu
      100          105          110

Gln Leu Gly Leu Gly Lys His Asn Tyr Cys Arg Glu Val Gly Ala Gln
      115          120          125

Gly Pro Lys Ala Leu Pro Thr Val Pro Arg Asn Leu Val Thr Ile Pro
      130          135          140

Phe Ser Gln Arg Ala Gly His Ser Thr Arg Glu Val Gln Pro Leu Val
      145          150          155          160

Glu Ser Ser Leu Arg Gly Gly Gly Arg Glu Gly Pro Leu Gly Trp Asn
      165          170          175

Asp Ile Pro Tyr Leu Ser Val Leu Pro Gly Asn Pro Asp Asn Arg Arg
      180          185          190

Arg Pro Trp Cys Tyr Val Gln Val Gly Leu Lys Pro Leu Val Gln Glu
      195          200          205

Cys Met Val His Asp Cys Ala Asp Gly Lys Lys Pro Ser Ser Pro Pro
      210          215          220

Glu Glu Leu Lys Phe Gln Cys Gly Gln Lys Thr Leu Arg Pro Arg Phe
      225          230          235          240

Lys Ile Ile Gly Gly Glu Phe Thr Thr Ile Glu Asn Gln Pro Trp Phe
      245          250          255

Ala Ala Ile Tyr Arg Arg His Arg Gly Gly Ser Val Thr Tyr Val Cys
      260          265          270

Gly Gly Ser Leu Ile Ser Pro Cys Trp Val Ile Ser Ala Thr His Cys
      275          280          285

Phe Ile Asp Tyr Pro Lys Lys Glu Asp Tyr Ile Val Tyr Leu Gly Arg
      290          295          300

Ser Arg Leu Asn Ser Asn Thr Gln Gly Glu Met Lys Phe Glu Val Glu

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<210> 36
<211> 285
<212> PRT
<213> Homo sapiens
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<400> 36
Met Gln Met Ser Pro Ala Leu Thr Cys Leu Val Leu Gly Leu Ala Leu
  1              5              10              15
Val Phe Gly Glu Gly Ser Ala Val His His Pro Pro Ser Tyr Val Ala
              20              25              30
His Leu Ala Ser Asp Phe Gly Val Arg Val Phe Gln Gln Val Ala Gln
              35              40              45
Ala Ser Lys Asp Arg Asn Val Val Phe Ser Pro Tyr Gly Val Ala Ser
  50              55              60
Val Leu Ala Met Leu Gln Leu Thr Thr Gly Gly Glu Thr Gln Gln Gln
  65              70              75              80
Ile Gln Ala Ala Met Gly Phe Lys Ile Asp Asp Lys Gly Met Ala Pro
              85              90              95
Ala Leu Arg His Leu Tyr Lys Glu Leu Met Gly Pro Trp Asn Lys Asp

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100										105					110						
Glu	Ile	Ser	Thr	Thr	Asp	Ala	Ile	Phe	Val	Gln	Arg	Asp	Leu	Lys	Leu						
		115					120					125									
Val	Gln	Gly	Phe	Met	Pro	His	Phe	Phe	Arg	Leu	Phe	Arg	Ser	Thr	Val						
	130					135					140										
Lys	Gln	Val	Asp	Phe	Ser	Glu	Val	Glu	Arg	Ala	Arg	Phe	Ile	Ile	Asn						
145					150					155					160						
Asp	Trp	Val	Lys	Thr	His	Thr	Lys	Gly	Met	Ile	Ser	Asn	Leu	Leu	Gly						
			165					170						175							
Lys	Gly	Ala	Val	Asp	Gln	Leu	Thr	Arg	Leu	Val	Leu	Val	Asn	Ala	Leu						
		180						185					190								
Tyr	Phe	Asn	Gly	Gln	Trp	Lys	Thr	Pro	Phe	Pro	Asp	Ser	Ser	Thr	His						
		195					200					205									
Arg	Arg	Leu	Phe	His	Lys	Ser	Asp	Gly	Ser	Thr	Val	Ser	Val	Pro	Met						
		210				215					220										
Met	Ala	Gln	Thr	Asn	Lys	Phe	Asn	Tyr	Thr	Glu	Phe	Thr	Thr	Pro	Asp						
225					230					235					240						
Gly	His	Tyr	Tyr	Asp	Ile	Leu	Glu	Leu	Pro	Tyr	His	Gly	Asp	Thr	Leu						
			245						250					255							
Ser	Met	Phe	Ile	Ala	Ala	Asp	Leu	Val	Pro	Thr	Glu	Ala	Leu	Cys	Arg						
		260						265					270								
Met	Glu	Leu	Arg	Gly	Leu	Gln	Glu	Leu	Leu	Cys	Ala	Trp									
	275					280						285									
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<211> 399																					
<212> PRT																					
<213> Homo sapiens																					
<400> 37																					
Met	Gln	Met	Ser	Pro	Ala	Leu	Thr	Cys	Leu	Val	Leu	Gly	Leu	Ala	Leu						
1				5					10					15							
Val	Phe	Gly	Glu	Gly	Ser	Ala	Val	His	His	Pro	Pro	Ser	Tyr	Val	Ala						
		20						25					30								
His	Leu	Ala	Ser	Asp	Phe	Gly	Val	Arg	Val	Phe	Gln	Gln	Val	Ala	Gln						
	35						40					45									
Ala	Ser	Lys	Asp	Arg	Asn	Val	Val	Phe	Ser	Pro	Tyr	Gly	Val	Ala	Ser						
	50				55					60											
Val	Leu	Ala	Met	Leu	Gln	Leu	Thr	Thr	Gly	Gly	Glu	Thr	Gln	Gln	Gln						
	65				70					75					80						
Ile	Gln	Ala	Ala	Met	Gly	Phe	Lys	Ile	Asp	Asp	Lys	Gly	Met	Ala	Pro						
			85					90					95								
Ala	Leu	Arg	His	Leu	Tyr	Lys	Glu	Leu	Met	Gly	Pro	Trp	Asn	Lys	Asp						

100	105	110
Glu Ile Ser Thr Thr Asp Ala Ile Phe Val Gln Arg Asp Leu Lys Leu 115 120 125		
Val Gln Gly Phe Met Pro His Phe Phe Arg Leu Phe Arg Ser Thr Val 130 135 140		
Lys Gln Val Asp Phe Ser Glu Val Glu Arg Ala Arg Phe Ile Ile Asn 145 150 155 160		
Asp Trp Val Lys Thr His Thr Lys Gly Met Ile Ser Asn Leu Leu Gly 165 170 175		
Lys Gly Ala Val Asp Gln Leu Thr Arg Leu Val Leu Val Asn Ala Leu 180 185 190		
Tyr Phe Asn Gly Gln Trp Lys Thr Pro Phe Pro Asp Ser Ser Thr His 195 200 205		
Arg Arg Leu Phe His Lys Ser Asp Gly Ser Thr Val Ser Val Pro Met 210 215 220		
Met Ala Gln Thr Asn Lys Phe Asn Tyr Thr Glu Phe Thr Thr Pro Asp 225 230 235 240		
Gly His Tyr Tyr Asp Ile Leu Glu Leu Pro Tyr His Gly Asp Thr Leu 245 250 255		
Ser Met Phe Ile Ala Ala Pro Tyr Glu Lys Glu Val Pro Leu Ser Ala 260 265 270		
Leu Thr Asn Ile Leu Ser Ala Gln Leu Ile Ser His Trp Lys Gly Asn 275 280 285		
Met Thr Arg Leu Pro Arg Leu Leu Val Leu Pro Lys Phe Ser Leu Glu 290 295 300		
Thr Glu Val Asp Leu Arg Lys Pro Leu Glu Asn Leu Gly Met Thr Asp 305 310 315 320		
Met Phe Arg Gln Phe Gln Ala Asp Phe Thr Ser Leu Ser Asp Gln Glu 325 330 335		
Pro Leu His Val Ala Gln Ala Leu Gln Lys Val Lys Ile Glu Val Asn 340 345 350		
Glu Ser Gly Thr Val Ala Ser Ser Ser Thr Ala Val Ile Val Ser Ala 355 360 365		
Arg Met Ala Pro Glu Glu Ile Ile Met Asp Arg Pro Phe Leu Phe Val 370 375 380		
Val Pro Pro Gln Lys Gln Cys Ala Trp Val Ile Leu Glu Cys Arg 385 390 395		

<210> 38
 <211> 317
 <212> PRT
 <213> Homo sapiens

<400> 38

Met Thr Ala Ala Ser Met Gly Pro Val Arg Val Ala Phe Val Val Leu
 1 5 10 15
 Leu Ala Leu Cys Ser Arg Pro Ala Val Gly Gln Asn Cys Ser Gly Pro
 20 25 30
 Cys Arg Cys Pro Asp Glu Pro Ala Pro Arg Cys Pro Ala Gly Val Ser
 35 40 45
 Leu Val Leu Asp Gly Cys Gly Cys Cys Arg Val Cys Ala Lys Gln Leu
 50 55 60
 Gly Glu Leu Cys Thr Glu Arg Asp Pro Cys Asp Pro His Lys Gly Leu
 65 70 75 80
 Phe Cys Asp Phe Gly Ser Pro Ala Asn Arg Lys Ile Gly Val Cys Thr
 85 90 95
 Ala Lys Asp Gly Ala Pro Cys Ile Phe Gly Gly Thr Val Tyr Arg Ser
 100 105 110
 Gly Glu Ser Phe Gln Ser Ser Cys Lys Tyr Gln Cys Thr Cys Leu Asp
 115 120 125
 Gly Ala Val Gly Cys Met Pro Leu Cys Ser Met Asp Val Arg Leu Pro
 130 135 140
 Ser Pro Asp Cys Pro Leu Pro Leu Glu Asp Thr Phe Gly Pro Asp Pro
 145 150 155 160
 Thr Met Ile Arg Ala Asn Cys Leu Val Gln Thr Thr Glu Trp Ser Ala
 165 170 175
 Cys Ser Lys Thr Cys Gly Met Gly Ile Ser Thr Arg Val Thr Asn Asp
 180 185 190
 Asn Ala Ser Cys Arg Leu Glu Lys Gln Ser Arg Leu Cys Met Val Arg
 195 200 205
 Pro Cys Glu Ser Asp Leu Glu Glu Asn Ile Lys Lys Gly Lys Lys Cys
 210 215 220
 Ile Arg Thr Pro Lys Ile Ser Lys Pro Ile Lys Phe Glu Leu Ser Gly
 225 230 235 240
 Cys Thr Ser Met Lys Thr Tyr Arg Ala Lys Phe Cys Gly Val Cys Thr
 245 250 255
 Asp Gly Arg Cys Cys Thr Pro His Arg Thr Thr Thr Leu Pro Val Glu
 260 265 270
 Phe Lys Cys Pro Asp Gly Glu Val Met Lys Lys Asn Met Met Phe Ile
 275 280 285
 Lys Thr Cys Ala Cys His Tyr Asn Cys Pro Gly Asp Asn Asp Ile Phe
 290 295 300
 Glu Ser Leu Tyr Tyr Arg Lys Met Tyr Gly Asp Met Ala
 305 310 315

<210> 39
 <211> 342
 <212> PRT
 <213> Homo sapiens

<400> 39

Asn	Met	Glu	Asn	Ser	Leu	Arg	Cys	Val	Trp	Val	Pro	Lys	Leu	Ala	Phe
1				5					10					15	
Val	Leu	Phe	Gly	Ala	Ser	Leu	Leu	Ser	Ala	His	Leu	Gln	Val	Thr	Gly
			20					25					30		
Phe	Gln	Ile	Lys	Ala	Phe	Thr	Ala	Leu	Arg	Phe	Leu	Ser	Glu	Pro	Ser
		35					40					45			
Asp	Ala	Val	Thr	Met	Arg	Gly	Gly	Asn	Val	Leu	Leu	Asp	Cys	Ser	Ala
	50					55					60				
Glu	Ser	Asp	Arg	Gly	Val	Pro	Val	Ile	Lys	Trp	Lys	Lys	Asp	Ala	Ile
65					70					75					80
His	Leu	Ala	Leu	Gly	Met	Asp	Glu	Arg	Lys	Gln	Gln	Leu	Ser	Asn	Gly
				85					90					95	
Ser	Leu	Leu	Ile	Gln	Asn	Ile	Leu	His	Ser	Arg	His	His	Lys	Pro	Asp
			100					105					110		
Glu	Gly	Leu	Tyr	Gln	Cys	Glu	Ala	Ser	Leu	Gly	Asp	Ser	Gly	Ser	Ile
		115					120					125			
Ile	Ser	Arg	Thr	Ala	Lys	Val	Ala	Val	Ala	Gly	Pro	Leu	Arg	Phe	Leu
		130				135					140				
Ser	Gln	Thr	Glu	Ser	Val	Thr	Ala	Phe	Met	Gly	Asp	Thr	Val	Leu	Leu
145					150					155					160
Lys	Cys	Glu	Val	Ile	Gly	Glu	Pro	Met	Pro	Thr	Ile	His	Trp	Gln	Lys
				165					170					175	
Asn	Gln	Gln	Asp	Leu	Thr	Pro	Ile	Pro	Gly	Asp	Ser	Arg	Val	Val	Val
			180					185					190		
Leu	Pro	Ser	Gly	Ala	Leu	Gln	Ile	Ser	Arg	Leu	Gln	Pro	Gly	Asp	Ile
		195					200					205			
Gly	Ile	Tyr	Arg	Cys	Ser	Ala	Arg	Asn	Pro	Ala	Ser	Ser	Arg	Thr	Gly
		210				215					220				
Asn	Glu	Ala	Glu	Val	Arg	Ile	Leu	Ser	Asp	Pro	Gly	Leu	His	Arg	Gln
225					230					235					240
Leu	Tyr	Phe	Leu	Gln	Arg	Pro	Ser	Asn	Val	Val	Ala	Ile	Glu	Gly	Lys
				245					250					255	
Asp	Ala	Val	Leu	Glu	Cys	Cys	Val	Ser	Gly	Tyr	Pro	Pro	Pro	Ser	Phe
			260					265						270	
Thr	Trp	Leu	Arg	Gly	Glu	Glu	Val	Ile	Gln	Leu	Arg	Ser	Lys	Lys	Tyr
		275					280						285		

Ser Leu Leu Gly Gly Ser Asn Leu Leu Ile Ser Asn Val Thr Asp Asp
290 295 300

Asp Ser Gly Met Tyr Thr Cys Val Val Thr Tyr Lys Asn Glu Asn Ile
305 310 315 320

Ser Ala Ser Ala Glu Leu Thr Val Leu Val Ile Ile Asp Lys Val Leu
325 330 335

Val Asp Thr Phe Trp Val
340

<210> 40

<211> 1433

<212> PRT

<213> Homo sapiens

<400> 40

Asn Met Glu Asn Ser Leu Arg Cys Val Trp Val Pro Lys Leu Ala Phe
1 5 10 15

Val Leu Phe Gly Ala Ser Leu Leu Ser Ala His Leu Gln Val Thr Gly
20 25 30

Phe Gln Ile Lys Ala Phe Thr Ala Leu Arg Phe Leu Ser Glu Pro Ser
35 40 45

Asp Ala Val Thr Met Arg Gly Gly Asn Val Leu Leu Asp Cys Ser Ala
50 55 60

Glu Ser Asp Arg Gly Val Pro Val Ile Lys Trp Lys Lys Asp Ala Ile
65 70 75 80

His Leu Ala Leu Gly Met Asp Glu Arg Lys Gln Gln Leu Ser Asn Gly
85 90 95

Ser Leu Leu Ile Gln Asn Ile Leu His Ser Arg His His Lys Pro Asp
100 105 110

Glu Gly Leu Tyr Gln Cys Glu Ala Ser Leu Gly Asp Ser Gly Ser Ile
115 120 125

Ile Ser Arg Thr Ala Lys Val Ala Val Ala Gly Pro Leu Arg Phe Leu
130 135 140

Ser Gln Thr Glu Ser Val Thr Ala Phe Met Gly Asp Thr Val Leu Leu
145 150 155 160

Lys Cys Glu Val Ile Gly Glu Pro Met Pro Thr Ile His Trp Gln Lys
165 170 175

Asn Gln Gln Asp Leu Thr Pro Ile Pro Gly Asp Ser Arg Val Val Val
180 185 190

Leu Pro Ser Gly Ala Leu Gln Ile Ser Arg Leu Gln Pro Gly Asp Ile
195 200 205

Gly Ile Tyr Arg Cys Ser Ala Arg Asn Pro Ala Ser Ser Arg Thr Gly
210 215 220

Asn Glu Ala Glu Val Arg Ile Leu Ser Asp Pro Gly Leu His Arg Gln
 225 230 235 240
 Leu Tyr Phe Leu Gln Arg Pro Ser Asn Val Val Ala Ile Glu Gly Lys
 245 250 255
 Asp Ala Val Leu Glu Cys Cys Val Ser Gly Tyr Pro Pro Pro Ser Phe
 260 265 270
 Thr Trp Leu Arg Gly Glu Glu Val Ile Gln Leu Arg Ser Lys Lys Tyr
 275 280 285
 Ser Leu Leu Gly Gly Ser Asn Leu Leu Ile Ser Asn Val Thr Asp Asp
 290 295 300
 Asp Ser Gly Met Tyr Thr Cys Val Val Thr Tyr Lys Asn Glu Asn Ile
 305 310 315 320
 Ser Ala Ser Ala Glu Leu Thr Val Leu Val Pro Pro Trp Phe Leu Asn
 325 330 335
 His Pro Ser Asn Leu Tyr Ala Tyr Glu Ser Met Asp Ile Glu Phe Glu
 340 345 350
 Cys Thr Val Ser Gly Lys Pro Val Pro Thr Val Asn Trp Met Lys Asn
 355 360 365
 Gly Asp Val Val Ile Pro Ser Asp Tyr Phe Gln Ile Val Gly Gly Ser
 370 375 380
 Asn Leu Arg Ile Leu Gly Val Val Lys Ser Asp Glu Gly Phe Tyr Gln
 385 390 395 400
 Cys Val Ala Glu Asn Glu Ala Gly Asn Ala Gln Thr Ser Ala Gln Leu
 405 410 415
 Ile Val Pro Lys Pro Ala Ile Pro Ser Ser Ser Val Leu Pro Ser Ala
 420 425 430
 Pro Arg Asp Val Val Pro Val Leu Val Ser Ser Arg Phe Val Arg Leu
 435 440 445
 Ser Trp Arg Pro Pro Ala Glu Ala Lys Gly Asn Ile Gln Thr Phe Thr
 450 455 460
 Val Phe Phe Ser Arg Glu Gly Asp Asn Arg Glu Arg Ala Leu Asn Thr
 465 470 475 480
 Thr Gln Pro Gly Ser Leu Gln Leu Thr Val Gly Asn Leu Lys Pro Glu
 485 490 495
 Ala Met Tyr Thr Phe Arg Val Val Ala Tyr Asn Glu Trp Gly Pro Gly
 500 505 510
 Glu Ser Ser Gln Pro Ile Lys Val Ala Thr Gln Pro Glu Leu Gln Val
 515 520 525
 Pro Gly Pro Val Glu Asn Leu Gln Ala Val Ser Thr Ser Pro Thr Ser
 530 535 540

Ile Leu Ile Thr Trp Glu Pro Pro Ala Tyr Ala Asn Gly Pro Val Gln
 545 550 555 560
 Gly Tyr Arg Leu Phe Cys Thr Glu Val Ser Thr Gly Lys Glu Gln Asn
 565 570 575
 Ile Glu Val Asp Gly Leu Ser Tyr Lys Leu Glu Gly Leu Lys Lys Phe
 580 585 590
 Thr Glu Tyr Ser Leu Arg Phe Leu Ala Tyr Asn Arg Tyr Gly Pro Gly
 595 600 605
 Val Ser Thr Asp Asp Ile Thr Val Val Thr Leu Ser Asp Val Pro Ser
 610 615 620
 Ala Pro Pro Gln Asn Val Ser Leu Glu Val Val Asn Ser Arg Ser Ile
 625 630 635 640
 Lys Val Ser Trp Leu Pro Pro Pro Ser Gly Thr Gln Asn Gly Phe Ile
 645 650 655
 Thr Gly Tyr Lys Ile Arg His Arg Lys Thr Thr Arg Arg Gly Glu Met
 660 665 670
 Glu Thr Leu Glu Pro Asn Asn Leu Trp Tyr Leu Phe Thr Gly Leu Glu
 675 680 685
 Lys Gly Ser Gln Tyr Ser Phe Gln Val Ser Ala Met Thr Val Asn Gly
 690 695 700
 Thr Gly Pro Pro Ser Asn Trp Tyr Thr Ala Glu Thr Pro Glu Asn Asp
 705 710 715 720
 Leu Asp Glu Ser Gln Val Pro Asp Gln Pro Ser Ser Leu His Val Arg
 725 730 735
 Pro Gln Thr Asn Cys Ile Ile Met Ser Trp Thr Pro Pro Leu Asn Pro
 740 745 750
 Asn Ile Val Val Arg Gly Tyr Ile Ile Gly Tyr Gly Val Gly Ser Pro
 755 760 765
 Tyr Ala Glu Thr Val Arg Val Asp Ser Lys Gln Arg Tyr Tyr Ser Ile
 770 775 780
 Glu Arg Leu Glu Ser Ser Ser His Tyr Val Ile Ser Leu Lys Ala Phe
 785 790 795 800
 Asn Asn Ala Gly Glu Gly Val Pro Leu Tyr Glu Ser Ala Thr Thr Arg
 805 810 815
 Ser Ile Thr Asp Pro Thr Asp Pro Val Asp Tyr Tyr Pro Leu Leu Asp
 820 825 830
 Asp Phe Pro Thr Ser Val Pro Asp Leu Ser Thr Pro Met Leu Pro Pro
 835 840 845
 Val Gly Val Gln Ala Val Ala Leu Thr His Asp Ala Val Arg Val Ser
 850 855 860
 Trp Ala Asp Asn Ser Val Pro Lys Asn Gln Lys Thr Ser Glu Val Arg

865	870	875	880
Leu Tyr Thr Val Arg Trp Arg Thr Ser Phe Ser Ala Ser Ala Lys Tyr			
885		890	895
Lys Ser Glu Asp Thr Thr Ser Leu Ser Tyr Thr Ala Thr Gly Leu Lys			
900		905	910
Pro Asn Thr Met Tyr Glu Phe Ser Val Met Val Thr Lys Asn Arg Arg			
915		920	925
Ser Ser Thr Trp Ser Met Thr Ala His Ala Thr Thr Tyr Glu Ala Ala			
930		935	940
Pro Thr Ser Ala Pro Lys Asp Phe Thr Val Ile Thr Arg Glu Gly Lys			
945		950	955
Pro Arg Ala Val Ile Val Ser Trp Gln Pro Pro Leu Glu Ala Asn Gly			
	965	970	975
Lys Ile Thr Ala Tyr Ile Leu Phe Tyr Thr Leu Asp Lys Asn Ile Pro			
	980	985	990
Ile Asp Asp Trp Ile Met Glu Thr Ile Ser Gly Asp Arg Leu Thr His			
	995	1000	1005
Gln Ile Met Asp Leu Asn Leu Asp Thr Met Tyr Tyr Phe Arg Ile Gln			
1010		1015	1020
Ala Arg Asn Ser Lys Gly Val Gly Pro Leu Ser Asp Pro Ile Leu Phe			
1025		1030	1035
Arg Thr Leu Lys Val Glu His Pro Asp Lys Met Ala Asn Asp Gln Gly			
	1045	1050	1055
Arg His Gly Asp Gly Gly Tyr Trp Pro Val Asp Thr Asn Leu Ile Asp			
	1060	1065	1070
Arg Ser Thr Leu Asn Glu Pro Pro Ile Gly Gln Met His Pro Pro His			
1075		1080	1085
Gly Ser Val Thr Pro Gln Lys Asn Ser Asn Leu Leu Val Ile Ile Val			
1090		1095	1100
Val Thr Val Gly Val Ile Thr Val Leu Val Val Val Ile Val Ala Val			
1105		1110	1115
Ile Cys Thr Arg Arg Ser Ser Ala Gln Gln Arg Lys Lys Arg Ala Thr			
	1125	1130	1135
His Ser Ala Gly Lys Arg Lys Gly Ser Gln Lys Asp Leu Arg Pro Pro			
1140		1145	1150
Asp Leu Trp Ile His His Glu Glu Met Glu Met Lys Asn Ile Glu Lys			
1155		1160	1165
Pro Ser Gly Thr Asp Pro Ala Gly Arg Asp Ser Pro Ile Gln Ser Cys			
1170		1175	1180
Gln Asp Leu Thr Pro Val Ser His Ser Gln Ser Glu Thr Gln Leu Gly			
1185		1190	1195
			1200

Ser Lys Ser Thr Ser His Ser Gly Gln Asp Thr Glu Glu Ala Gly Ser
1205 1210 1215

Ser Met Ser Thr Leu Glu Arg Ser Leu Ala Ala Arg Arg Ala Pro Arg
1220 1225 1230

Ala Lys Leu Met Ile Pro Met Asp Ala Gln Ser Asn Asn Pro Ala Val
1235 1240 1245

Val Ser Ala Ile Pro Val Pro Thr Leu Glu Ser Ala Gln Tyr Pro Gly
1250 1255 1260

Ile Leu Pro Ser Pro Thr Cys Gly Tyr Pro His Pro Gln Phe Thr Leu
1265 1270 1275 1280

Arg Pro Val Pro Phe Pro Thr Leu Ser Val Asp Arg Gly Phe Gly Ala
1285 1290 1295

Gly Arg Ser Gln Ser Val Ser Glu Gly Pro Thr Thr Gln Gln Pro Pro
1300 1305 1310

Met Leu Pro Pro Ser Gln Pro Glu His Ser Ser Ser Glu Glu Ala Pro
1315 1320 1325

Ser Arg Thr Ile Pro Thr Ala Cys Val Arg Pro Thr His Pro Leu Arg
1330 1335 1340

Ser Phe Ala Asn Pro Leu Leu Pro Pro Pro Met Ser Ala Ile Glu Pro
1345 1350 1355 1360

Lys Val Pro Tyr Thr Pro Leu Leu Ser Gln Pro Gly Pro Thr Leu Pro
1365 1370 1375

Lys Thr His Val Lys Thr Ala Ser Leu Gly Leu Ala Gly Lys Ala Arg
1380 1385 1390

Ser Pro Leu Leu Pro Val Ser Val Pro Thr Ala Pro Glu Val Ser Glu
1395 1400 1405

Glu Ser His Lys Pro Thr Glu Asp Ser Ala Asn Val Ser Ala Ser Leu
1410 1415 1420

Lys Phe Met Leu His Gln Gly Thr Asp
1425 1430

<210> 41

<211> 865

<212> PRT

<213> Homo sapiens

<400> 41

Met Pro Gly Lys Arg Gly Leu Gly Trp Trp Trp Ala Arg Leu Pro Leu
1 5 10 15

Cys Leu Leu Leu Ser Leu Tyr Gly Pro Trp Met Pro Ser Ser Leu Gly
20 25 30

Lys Pro Lys Gly His Pro His Met Asn Ser Ile Arg Ile Asp Gly Asp
35 40 45

Ile Thr Leu Gly Gly Leu Phe Pro Val His Gly Arg Gly Ser Glu Gly
 50 55 60
 Lys Pro Cys Gly Glu Leu Lys Lys Glu Lys Gly Ile His Arg Leu Glu
 65 70 75 80
 Ala Met Leu Phe Ala Leu Asp Arg Ile Asn Asn Asp Pro Asp Leu Leu
 85 90 95
 Pro Asn Ile Thr Leu Gly Ala Arg Ile Leu Asp Thr Cys Ser Arg Asp
 100 105 110
 Thr His Ala Leu Glu Gln Ser Leu Thr Phe Val Gln Ala Leu Ile Glu
 115 120 125
 Lys Asp Gly Thr Glu Val Arg Cys Gly Ser Gly Gly Pro Pro Ile Ile
 130 135 140
 Thr Lys Pro Glu Arg Val Val Gly Val Ile Gly Ala Ser Gly Ser Ser
 145 150 155 160
 Val Ser Ile Met Val Ala Asn Ile Leu Arg Leu Phe Lys Ile Pro Gln
 165 170 175
 Ile Ser Tyr Ala Ser Thr Ala Pro Asp Leu Ser Asp Asn Ser Arg Tyr
 180 185 190
 Asp Phe Phe Ser Arg Val Val Pro Ser Asp Thr Tyr Gln Ala Gln Ala
 195 200 205
 Met Val Asp Ile Val Arg Ala Leu Lys Trp Asn Tyr Val Ser Thr Val
 210 215 220
 Ala Ser Glu Gly Ser Tyr Gly Glu Ser Gly Val Glu Ala Phe Ile Gln
 225 230 235 240
 Lys Ser Arg Glu Asp Gly Gly Val Cys Ile Ala Gln Ser Val Lys Ile
 245 250 255
 Pro Arg Glu Pro Lys Ala Gly Glu Phe Asp Lys Ile Ile Arg Arg Leu
 260 265 270
 Leu Glu Thr Ser Asn Ala Arg Ala Val Ile Ile Phe Ala Asn Glu Asp
 275 280 285
 Asp Ile Arg Arg Val Leu Glu Ala Ala Arg Arg Ala Asn Gln Thr Gly
 290 295 300
 His Phe Phe Trp Met Gly Ser Asp Ser Trp Gly Ser Lys Ile Ala Pro
 305 310 315 320
 Val Leu His Leu Glu Glu Val Ala Glu Gly Ala Val Thr Ile Leu Pro
 325 330 335
 Lys Arg Met Ser Val Arg Asp Arg Glu Arg Ile Gly Gln Asp Ser Ala
 340 345 350
 Tyr Glu Gln Glu Gly Lys Val Gln Phe Val Ile Asp Ala Val Tyr Ala
 355 360 365

Met Gly His Ala Leu His Ala Met His Arg Asp Leu Cys Pro Gly Arg
 370 375 380
 Val Gly Leu Cys Pro Arg Met Asp Pro Val Asp Gly Thr Gln Leu Leu
 385 390 395 400
 Lys Tyr Ile Arg Asn Val Asn Phe Ser Gly Ile Ala Gly Asn Pro Val
 405 410 415
 Thr Phe Asn Glu Asn Gly Asp Ala Pro Gly Arg Tyr Asp Ile Tyr Gln
 420 425 430
 Tyr Gln Leu Arg Asn Asp Ser Ala Glu Tyr Lys Val Ile Gly Ser Trp
 435 440 445
 Thr Asp His Leu His Leu Arg Ile Glu Arg Met His Trp Pro Gly Ser
 450 455 460
 Gly Gln Gln Leu Pro Arg Ser Ile Cys Ser Leu Pro Cys Gln Pro Gly
 465 470 475 480
 Glu Arg Lys Lys Thr Val Lys Gly Met Pro Cys Cys Trp His Cys Glu
 485 490 495
 Pro Cys Thr Gly Tyr Gln Tyr Gln Val Asp Arg Tyr Thr Cys Lys Thr
 500 505 510
 Cys Pro Tyr Asp Met Arg Pro Thr Glu Asn Arg Thr Gly Cys Arg Pro
 515 520 525
 Ile Pro Ile Ile Lys Leu Glu Trp Gly Ser Pro Trp Ala Val Leu Pro
 530 535 540
 Leu Phe Leu Ala Val Val Gly Ile Ala Ala Thr Leu Phe Val Val Ile
 545 550 555 560
 Thr Phe Val Arg Tyr Asn Asp Thr Pro Ile Val Lys Ala Ser Gly Arg
 565 570 575
 Glu Leu Ser Tyr Val Leu Leu Ala Gly Ile Phe Leu Cys Tyr Ala Thr
 580 585 590
 Thr Phe Leu Met Ile Ala Glu Pro Asp Leu Gly Thr Cys Ser Leu Arg
 595 600 605
 Arg Ile Phe Leu Gly Leu Gly Met Ser Ile Ser Tyr Ala Ala Leu Leu
 610 615 620
 Thr Lys Thr Asn Arg Ile Tyr Arg Ile Phe Glu Gln Gly Lys Arg Ser
 625 630 635 640
 Val Ser Ala Pro Arg Phe Ile Ser Pro Ala Ser Gln Leu Ala Ile Thr
 645 650 655
 Phe Ser Leu Ile Ser Leu Gln Leu Leu Gly Ile Cys Val Trp Phe Val
 660 665 670
 Val Asp Pro Ser His Ser Val Val Asp Phe Gln Asp Gln Arg Thr Leu
 675 680 685
 Asp Pro Arg Phe Ala Arg Gly Val Leu Lys Cys Asp Ile Ser Asp Leu

690 695 700
 Ser Leu Ile Cys Leu Leu Gly Tyr Ser Met Leu Leu Met Val Thr Cys
 705 710 715 720
 Thr Val Tyr Ala Ile Lys Thr Arg Gly Val Pro Glu Thr Phe Asn Glu
 725 730 735
 Ala Lys Pro Ile Gly Phe Thr Met Tyr Thr Thr Cys Ile Val Trp Leu
 740 745 750
 Ala Phe Ile Pro Ile Phe Phe Gly Thr Ser Gln Ser Ala Asp Lys Leu
 755 760 765
 Tyr Ile Gln Thr Thr Thr Leu Thr Val Ser Val Ser Leu Ser Ala Ser
 770 775 780
 Val Ser Leu Gly Met Leu Tyr Met Pro Lys Val Tyr Ile Ile Leu Phe
 785 790 795 800
 His Pro Glu Gln Asn Val Pro Lys Arg Lys Arg Ser Leu Lys Ala Val
 805 810 815
 Val Thr Ala Ala Thr Met Ser Asn Lys Phe Thr Gln Lys Gly Asn Phe
 820 825 830
 Arg Pro Asn Gly Glu Ala Lys Ser Glu Leu Cys Glu Asn Leu Glu Ala
 835 840 845
 Pro Ala Leu Ala Thr Lys Gln Thr Tyr Val Thr Tyr Thr Asn His Ala
 850 855 860
 Ile
 865

 <210> 42
 <211> 845
 <212> PRT
 <213> Homo sapiens

 <400> 42
 Met Glu Thr Lys Gly Tyr His Ser Leu Pro Glu Gly Leu Asp Met Glu
 1 5 10 15
 Arg Arg Trp Gly Gln Val Ser Gln Ala Val Glu Arg Ser Ser Leu Gly
 20 25 30
 Pro Thr Glu Arg Thr Asp Glu Asn Asn Tyr Met Glu Ile Val Asn Val
 35 40 45
 Ser Cys Val Ser Gly Ala Ile Pro Asn Asn Ser Thr Gln Gly Ser Ser
 50 55 60
 Lys Glu Lys Gln Glu Leu Leu Pro Cys Leu Gln Gln Asp Asn Asn Arg
 65 70 75 80
 Pro Gly Ile Leu Thr Ser Asp Ile Lys Thr Glu Leu Glu Ser Lys Glu
 85 90 95
 Leu Ser Ala Thr Val Ala Glu Ser Met Gly Leu Tyr Met Asp Ser Val

100	105	110
Arg Asp Ala 115	Asp Tyr Ser Tyr Glu Gln Gln Asn Gln Gln Gly Ser Met 120	125
Ser Pro Ala 130	Lys Ile Tyr Gln Asn Val Glu Gln Leu Val Lys Phe Tyr 135	140
Lys Gly Asn Gly His Arg Pro Ser Thr Leu Ser Cys Val Asn Thr Pro 145	150	155 160
Leu Arg Ser Phe Met 165	Ser Asp Ser Gly Ser Ser Val Asn Gly Gly Val 170	175
Met Arg Ala Ile Val Lys Ser Pro Ile Met Cys His Glu Lys Ser Pro 180	185	190
Ser Val Cys Ser Pro Leu Asn Met Thr Ser Ser Val Cys Ser Pro Ala 195	200	205
Gly Ile Asn Ser Val Ser Ser Thr Thr Ala Ser Phe Gly Ser Phe Pro 210	215	220
Val His Ser Pro Ile Thr Gln Gly Thr Pro Leu Thr Cys Ser Pro Asn 225	230	235 240
Ala Glu Asn Arg Gly Ser Arg Ser His Ser Pro Ala His Ala Ser Asn 245	250	255
Val Gly Ser Pro Leu Ser Ser Pro Leu Ser Ser Met Lys Ser Ser Ile 260	265	270
Ser Ser Pro Pro Ser His Cys Ser Val Lys Ser Pro Val Ser Ser Pro 275	280	285
Asn Asn Val Thr Leu Arg Ser Ser Val Ser Ser Pro Ala Asn Ile Asn 290	295	300
Asn Ser Arg Cys Ser Val Ser Ser Pro Ser Asn Thr Asn Asn Arg Ser 305	310	315 320
Thr Leu Ser Ser Pro Ala Ala Ser Thr Val Gly Ser Ile Cys Ser Pro 325	330	335
Val Asn Asn Ala Phe Ser Tyr Thr Ala Ser Gly Thr Ser Ala Gly Ser 340	345	350
Ser Thr Leu Arg Asp Val Val Pro Ser Pro Asp Thr Gln Glu Lys Gly 355	360	365
Ala Gln Glu Val Pro Phe Pro Lys Thr Glu Glu Val Glu Ser Ala Ile 370	375	380
Ser Asn Gly Val Thr Gly Gln Leu Asn Ile Val Gln Tyr Ile Lys Pro 385	390	395 400
Glu Pro Asp Gly Ala Phe Ser Ser Ser Cys Leu Gly Gly Asn Ser Lys 405	410	415
Ile Asn Ser Asp Ser Ser Phe Ser Val Pro Ile Lys Gln Glu Ser Thr 420	425	430

Lys His Ser Cys Ser Gly Thr Ser Phe Lys Gly Asn Pro Thr Val Asn
 435 440 445
 Pro Phe Pro Phe Met Asp Gly Ser Tyr Phe Ser Phe Met Asp Asp Lys
 450 455 460
 Asp Tyr Tyr Ser Leu Ser Gly Ile Leu Gly Pro Pro Val Pro Gly Phe
 465 470 475 480
 Asp Gly Asn Cys Glu Gly Ser Gly Phe Pro Val Gly Ile Lys Gln Glu
 485 490 495
 Pro Asp Asp Gly Ser Tyr Tyr Pro Glu Ala Ser Ile Pro Ser Ser Ala
 500 505 510
 Ile Val Gly Val Asn Ser Gly Gly Gln Ser Phe His Tyr Arg Ile Gly
 515 520 525
 Ala Gln Gly Thr Ile Ser Leu Ser Arg Ser Ala Arg Asp Gln Ser Phe
 530 535 540
 Gln His Leu Ser Ser Phe Pro Pro Val Asn Thr Leu Val Glu Ser Trp
 545 550 555 560
 Lys Ser His Gly Asp Leu Ser Ser Arg Arg Ser Asp Gly Tyr Pro Val
 565 570 575
 Leu Glu Tyr Ile Pro Glu Asn Val Ser Ser Ser Thr Leu Arg Ser Val
 580 585 590
 Ser Thr Gly Ser Ser Arg Pro Ser Lys Ile Cys Leu Val Cys Gly Asp
 595 600 605
 Glu Ala Ser Gly Cys His Tyr Gly Val Val Thr Cys Gly Ser Cys Lys
 610 615 620
 Val Phe Phe Lys Arg Ala Val Glu Gly Gln His Asn Tyr Leu Cys Ala
 625 630 635 640
 Gly Arg Asn Asp Cys Ile Ile Asp Lys Ile Arg Arg Lys Asn Cys Pro
 645 650 655
 Ala Cys Arg Leu Gln Lys Cys Leu Gln Ala Gly Met Asn Leu Gly Ala
 660 665 670
 Arg Lys Ser Lys Lys Leu Gly Lys Leu Lys Gly Ile His Glu Glu Gln
 675 680 685
 Pro Gln Gln Gln Gln Pro Pro Pro Pro Pro Pro Pro Gln Ser Pro
 690 695 700
 Glu Glu Gly Thr Thr Tyr Ile Ala Pro Ala Lys Glu Pro Ser Val Asn
 705 710 715 720
 Thr Ala Leu Val Pro Gln Leu Ser Thr Ile Ser Arg Ala Leu Thr Pro
 725 730 735
 Ser Pro Val Met Val Leu Glu Asn Ile Glu Pro Glu Ile Val Tyr Ala
 740 745 750

Gly Tyr Asp Ser Ser Lys Pro Asp Thr Ala Glu Asn Leu Leu Ser Thr
 755 760 765
 Leu Asn Arg Leu Ala Gly Lys Gln Met Ile Gln Val Val Lys Trp Ala
 770 775 780
 Lys Val Leu Pro Gly Phe Lys Asn Leu Pro Leu Glu Asp Gln Ile Thr
 785 790 795 800
 Leu Ile Gln Tyr Ser Trp Met Cys Leu Ser Ser Phe Ala Leu Ser Trp
 805 810 815
 Arg Ser Tyr Lys His Thr Asn Ser Gln Phe Leu Tyr Phe Ala Pro Asp
 820 825 830
 Leu Val Phe Asn Glu Leu Leu Ala Arg Val Arg Glu Gly
 835 840 845

<210> 43

<211> 837

<212> PRT

<213> Homo sapiens

<400> 43

Met Glu Thr Lys Gly Tyr His Ser Leu Pro Glu Gly Leu Asp Met Glu
 1 5 10 15
 Arg Arg Trp Gly Gln Val Ser Gln Ala Val Glu Arg Ser Ser Leu Gly
 20 25 30
 Pro Thr Glu Arg Thr Asp Glu Asn Asn Tyr Met Glu Ile Val Asn Val
 35 40 45
 Ser Cys Val Ser Gly Ala Ile Pro Asn Asn Ser Thr Gln Gly Ser Ser
 50 55 60
 Lys Glu Lys Gln Glu Leu Leu Pro Cys Leu Gln Gln Asp Asn Asn Arg
 65 70 75 80
 Pro Gly Ile Leu Thr Ser Asp Ile Lys Thr Glu Leu Glu Ser Lys Glu
 85 90 95
 Leu Ser Ala Thr Val Ala Glu Ser Met Gly Leu Tyr Met Asp Ser Val
 100 105 110
 Arg Asp Ala Asp Tyr Ser Tyr Glu Gln Gln Asn Gln Gln Gly Ser Met
 115 120 125
 Ser Pro Ala Lys Ile Tyr Gln Asn Val Glu Gln Leu Val Lys Phe Tyr
 130 135 140
 Lys Gly Asn Gly His Arg Pro Ser Thr Leu Ser Cys Val Asn Thr Pro
 145 150 155 160
 Leu Arg Ser Phe Met Ser Asp Ser Gly Ser Ser Val Asn Gly Gly Val
 165 170 175
 Met Arg Ala Ile Val Lys Ser Pro Ile Met Cys His Glu Lys Ser Pro
 180 185 190

Ser Val Cys Ser Pro Leu Asn Met Thr Ser Ser Val Cys Ser Pro Ala
 195 200 205
 Gly Ile Asn Ser Val Ser Ser Thr Thr Ala Ser Phe Gly Ser Phe Pro
 210 215 220
 Val His Ser Pro Ile Thr Gln Gly Thr Pro Leu Thr Cys Ser Pro Asn
 225 230 235 240
 Ala Glu Asn Arg Gly Ser Arg Ser His Ser Pro Ala His Ala Ser Asn
 245 250 255
 Val Gly Ser Pro Leu Ser Ser Pro Leu Ser Ser Met Lys Ser Ser Ile
 260 265 270
 Ser Ser Pro Pro Ser His Cys Ser Val Lys Ser Pro Val Ser Ser Pro
 275 280 285
 Asn Asn Val Thr Leu Arg Ser Ser Val Ser Ser Pro Ala Asn Ile Asn
 290 295 300
 Asn Ser Arg Cys Ser Val Ser Ser Pro Ser Asn Thr Asn Asn Arg Ser
 305 310 315 320
 Thr Leu Ser Ser Pro Ala Ala Ser Thr Val Gly Ser Ile Cys Ser Pro
 325 330 335
 Val Asn Asn Ala Phe Ser Tyr Thr Ala Ser Gly Thr Ser Ala Gly Ser
 340 345 350
 Ser Thr Leu Arg Asp Val Val Pro Ser Pro Asp Thr Gln Glu Lys Gly
 355 360 365
 Ala Gln Glu Val Pro Phe Pro Lys Thr Glu Glu Val Glu Ser Ala Ile
 370 375 380
 Ser Asn Gly Val Thr Gly Gln Leu Asn Ile Val Gln Tyr Ile Lys Pro
 385 390 395 400
 Glu Pro Asp Gly Ala Phe Ser Ser Ser Cys Leu Gly Gly Asn Ser Lys
 405 410 415
 Ile Asn Ser Asp Ser Ser Phe Ser Val Pro Ile Lys Gln Glu Ser Thr
 420 425 430
 Lys His Ser Cys Ser Gly Thr Ser Phe Lys Gly Asn Pro Thr Val Asn
 435 440 445
 Pro Phe Pro Phe Met Asp Gly Ser Tyr Phe Ser Phe Met Asp Asp Lys
 450 455 460
 Asp Tyr Tyr Ser Leu Ser Gly Ile Leu Gly Pro Pro Val Pro Gly Phe
 465 470 475 480
 Asp Gly Asn Cys Glu Gly Ser Gly Phe Pro Val Gly Ile Lys Gln Glu
 485 490 495
 Pro Asp Asp Gly Ser Tyr Tyr Pro Glu Ala Ser Ile Pro Ser Ser Ala
 500 505 510
 Ile Val Gly Val Asn Ser Gly Gly Gln Ser Phe His Tyr Arg Ile Gly

515	520	525
Ala Gln Gly Thr Ile Ser 530	Leu Ser Arg Ser 535	Ala Arg Asp Gln Ser Phe 540
Gln His Leu Ser Ser 545	Phe Pro Pro Val Asn Thr 550 555	Leu Val Glu Ser Trp 560
Lys Ser His Gly Asp Leu Ser Ser Arg 565	Arg Ser Asp Gly Tyr Pro Val 570 575	
Leu Glu Tyr Ile Pro Glu Asn Val Ser Ser Ser Thr Leu Arg Ser Val 580	585	590
Ser Thr Gly Ser Ser Arg Pro Ser Lys Ile Cys Leu Val Cys Gly Asp 595	600	605
Glu Ala Ser Gly Cys His Tyr Gly Val Val Thr Cys Gly Ser Cys Lys 610	615	620
Val Phe Phe Lys Arg Ala Val Glu Gly Gln His Asn Tyr Leu Cys Ala 625	630	635
Gly Arg Asn Asp Cys Ile Ile Asp Lys Ile Arg Arg Lys Asn Cys Pro 645	650	655
Ala Cys Arg Leu Gln Lys Cys Leu Gln Ala Gly Met Asn Leu Gly Ala 660	665	670
Arg Lys Ser Lys Lys Leu Gly Lys Leu Lys Gly Ile His Glu Glu Gln 675	680	685
Pro Gln Gln Gln Gln Pro Pro Pro Pro Pro Pro Pro Gln Ser Pro 690	695	700
Glu Glu Gly Thr Thr Tyr Ile Ala Pro Ala Lys Glu Pro Ser Val Asn 705	710	715 720
Thr Ala Leu Val Pro Gln Leu Ser Thr Ile Ser Arg Ala Leu Thr Pro 725	730	735
Ser Pro Val Met Val Leu Glu Asn Ile Glu Pro Glu Ile Val Tyr Ala 740	745	750
Gly Tyr Asp Ser Ser Lys Pro Asp Thr Ala Glu Asn Leu Leu Ser Thr 755	760	765
Leu Asn Arg Leu Ala Gly Lys Gln Met Ile Gln Val Val Lys Trp Ala 770	775	780
Lys Val Leu Pro Gly Phe Lys Asn Leu Pro Leu Glu Asp Gln Ile Thr 785	790	795 800
Leu Ile Gln Tyr Ser Trp Met Cys Leu Ser Ser Phe Ala Leu Ser Trp 805	810	815
Arg Ser Tyr Lys His Thr Asn Ser Gln Phe Leu Tyr Phe Ala Pro Asp 820	825	830
Leu Val Phe Asn Glu 835		

<210> 44
 <211> 640
 <212> PRT
 <213> Homo sapiens

<400> 44
 Met Gly Arg Leu Gln Leu Val Val Leu Gly Leu Thr Cys Cys Trp Ala
 1 5 10 15
 Val Ala Ser Ala Ala Lys Leu Gly Ala Val Tyr Thr Glu Gly Gly Phe
 20 25 30
 Val Glu Gly Val Asn Lys Lys Leu Gly Leu Leu Gly Asp Ser Val Asp
 35 40 45
 Ile Phe Lys Gly Ile Pro Phe Ala Ala Pro Thr Lys Ala Leu Glu Asn
 50 55 60
 Pro Gln Pro His Pro Gly Trp Gln Gly Thr Leu Lys Ala Lys Asn Phe
 65 70 75 80
 Lys Lys Arg Cys Leu Gln Ala Thr Ile Thr Gln Asp Ser Thr Tyr Gly
 85 90 95
 Asp Glu Asp Cys Leu Tyr Leu Asn Ile Trp Val Pro Gln Gly Arg Lys
 100 105 110
 Gln Val Ser Arg Asp Leu Pro Val Met Ile Trp Ile Tyr Gly Gly Ala
 115 120 125
 Phe Leu Met Gly Ser Gly His Gly Ala Asn Phe Leu Asn Asn Tyr Leu
 130 135 140
 Tyr Asp Gly Glu Glu Ile Ala Thr Arg Gly Asn Val Ile Val Val Thr
 145 150 155 160
 Phe Asn Tyr Arg Val Gly Pro Leu Gly Phe Leu Ser Thr Gly Asp Ala
 165 170 175
 Asn Leu Pro Gly Asn Tyr Gly Leu Arg Asp Gln His Met Ala Ile Ala
 180 185 190
 Trp Val Lys Arg Asn Ile Ala Ala Phe Gly Gly Asp Pro Asn Asn Ile
 195 200 205
 Thr Leu Phe Gly Glu Ser Ala Gly Gly Ala Ser Val Ser Leu Gln Thr
 210 215 220
 Leu Ser Pro Tyr Asn Lys Gly Leu Ile Arg Arg Ala Ile Ser Gln Ser
 225 230 235 240
 Gly Val Ala Leu Ser Pro Trp Val Ile Gln Lys Asn Pro Leu Phe Trp
 245 250 255
 Ala Lys Lys Val Ala Glu Lys Val Gly Cys Pro Val Gly Asp Ala Ala
 260 265 270
 Arg Met Ala Gln Cys Leu Lys Val Thr Asp Pro Arg Ala Leu Thr Leu
 275 280 285

Ala Tyr Lys Val Pro Leu Ala Gly Leu Glu Tyr Pro Met Leu His Tyr
 290 295 300
 Val Gly Phe Val Pro Val Ile Asp Gly Asp Phe Ile Pro Ala Asp Pro
 305 310 315 320
 Ile Asn Leu Tyr Ala Asn Ala Ala Asp Ile Asp Tyr Ile Ala Gly Thr
 325 330 335
 Asn Asn Met Asp Gly His Ile Phe Ala Ser Ile Asp Met Pro Ala Ile
 340 345 350
 Asn Lys Gly Asn Lys Lys Val Thr Glu Glu Asp Phe Tyr Lys Leu Val
 355 360 365
 Ser Glu Phe Thr Ile Thr Lys Gly Leu Arg Gly Ala Lys Thr Thr Phe
 370 375 380
 Asp Val Tyr Thr Glu Ser Trp Ala Gln Asp Pro Ser Gln Glu Asn Lys
 385 390 395 400
 Lys Lys Thr Val Val Asp Phe Glu Thr Asp Val Leu Phe Leu Val Pro
 405 410 415
 Thr Glu Ile Ala Leu Ala Gln His Arg Ala Asn Ala Lys Ser Ala Lys
 420 425 430
 Thr Tyr Ala Tyr Leu Phe Ser His Pro Ser Arg Met Pro Val Tyr Pro
 435 440 445
 Lys Trp Val Gly Ala Asp His Ala Asp Asp Ile Gln Tyr Val Phe Gly
 450 455 460
 Lys Pro Phe Ala Thr Pro Thr Gly Tyr Arg Pro Gln Asp Arg Thr Val
 465 470 475 480
 Ser Lys Ala Met Ile Ala Tyr Trp Thr Asn Phe Ala Lys Thr Gly Asp
 485 490 495
 Pro Asn Met Gly Asp Ser Ala Val Pro Thr His Trp Glu Pro Tyr Thr
 500 505 510
 Thr Glu Asn Ser Gly Tyr Leu Glu Ile Thr Lys Lys Met Gly Ser Ser
 515 520 525
 Ser Met Lys Arg Ser Leu Arg Thr Asn Phe Leu Arg Tyr Trp Thr Leu
 530 535 540
 Thr Tyr Leu Ala Leu Pro Thr Val Thr Asp Gln Glu Ala Thr Pro Val
 545 550 555 560
 Pro Pro Thr Gly Asp Ser Glu Ala Thr Pro Val Pro Pro Thr Gly Asp
 565 570 575
 Ser Glu Thr Ala Pro Val Pro Pro Thr Gly Asp Ser Gly Ala Pro Pro
 580 585 590
 Val Pro Pro Thr Gly Asp Ser Gly Ala Pro Pro Val Pro Pro Thr Gly
 595 600 605

Asp Ser Gly Ala Pro Pro Val Pro Pro Thr Gly Asp Ser Gly Ala Pro
610 615 620

Pro Val Pro Pro Thr Gly Asp Ser Gly Ala Pro Pro Val Pro Pro Pro
625 630 635 640

<210> 45
<211> 201
<212> PRT
<213> Homo sapiens

<400> 45
Met Arg Ala Leu Leu Ala Arg Leu Leu Leu Cys Val Leu Val Val Ser
1 5 10 15

Asp Ser Lys Gly Ser Asn Glu Leu His Gln Val Pro Ser Asn Cys Asp
20 25 30

Cys Leu Asn Gly Gly Thr Cys Val Ser Asn Lys Tyr Phe Ser Asn Ile
35 40 45

His Trp Cys Asn Cys Pro Lys Lys Phe Gly Gly Gln His Cys Glu Ile
50 55 60

Asp Lys Ser Lys Thr Cys Tyr Glu Gly Asn Gly His Phe Tyr Arg Gly
65 70 75 80

Lys Ala Ser Thr Asp Thr Met Gly Arg Pro Cys Leu Pro Trp Asn Ser
85 90 95

Ala Thr Val Leu Gln Gln Thr Tyr His Ala His Arg Ser Asp Ala Leu
100 105 110

Gln Leu Gly Leu Gly Lys His Asn Tyr Cys Arg Glu Val Gly Ala Gln
115 120 125

Gly Pro Lys Ala Leu Pro Thr Val Pro Arg Asn Leu Val Thr Ile Pro
130 135 140

Phe Ser Gln Arg Ala Gly His Ser Thr Arg Glu Val Gln Pro Leu Val
145 150 155 160

Glu Ser Ser Leu Arg Gly Gly Gly Arg Glu Gly Pro Leu Gly Trp Asn
165 170 175

Asp Ile Pro Tyr Leu Ser Val Leu Pro Gly Thr Gln Thr Thr Gly Gly
180 185 190

Asp Pro Gly Ala Met Cys Arg Trp Ala
195 200

<210> 46
<211> 74
<212> PRT
<213> Homo sapiens

<400> 46

Met Lys Thr Tyr Arg Ala Lys Phe Cys Gly Val Cys Thr Asp Gly Arg
 1 5 10 15
 Cys Cys Thr Pro His Arg Thr Thr Thr Leu Pro Val Glu Phe Lys Cys
 20 25 30
 Pro Asp Gly Glu Val Met Lys Lys Asn Met Met Phe Ile Lys Thr Cys
 35 40 45
 Ala Cys His Tyr Asn Cys Pro Gly Asp Asn Asp Ile Phe Glu Ser Leu
 50 55 60
 Tyr Tyr Arg Lys Met Tyr Gly Asp Met Ala
 65 70

<210> 47

<211> 166

<212> PRT

<213> Homo sapiens

<400> 47

Met Thr Ala Ala Ser Met Gly Pro Val Arg Val Ala Phe Val Val Leu
 1 5 10 15
 Leu Ala Leu Cys Ser Arg Pro Ala Val Gly Gln Asn Cys Ser Gly Pro
 20 25 30
 Cys Arg Cys Pro Asp Glu Pro Ala Pro Arg Cys Pro Ala Gly Val Ser
 35 40 45
 Leu Val Leu Asp Gly Cys Gly Cys Cys Arg Val Cys Ala Lys Gln Leu
 50 55 60
 Gly Glu Leu Cys Thr Glu Arg Asp Pro Cys Asp Pro His Lys Gly Leu
 65 70 75 80
 Phe Cys Asp Phe Gly Ser Pro Ala Asn Arg Lys Ile Gly Val Cys Thr
 85 90 95
 Ala Lys Asp Gly Ala Pro Cys Ile Phe Gly Gly Thr Val Tyr Arg Ser
 100 105 110
 Gly Glu Ser Phe Gln Ser Ser Cys Lys Tyr Gln Cys Thr Cys Leu Asp
 115 120 125
 Gly Ala Val Gly Cys Met Pro Leu Cys Ser Met Asp Val Arg Leu Pro
 130 135 140
 Ser Pro Asp Cys Pro Phe Pro Ser Leu Pro Thr Gly Arg His Val Trp
 145 150 155 160
 Pro Arg Pro Asn Tyr Asp
 165

<210> 48

<211> 140

<212> PRT

<213> Homo sapiens

Met. Glu Asn Ser Leu Arg Cys Val Trp Val Pro Lys Leu Ala Phe Val
1 5 10 15

Glu Gln Pro Glu Leu Ser Ser Ala Pro Gly Leu His Gln Asp Leu His

130

135

140

Cys Trp Leu
145

<210> 50
<211> 82
<212> PRT
<213> Homo sapiens

<400> 50
Met Ser Val Lys Glu Thr Leu Pro Leu Ile His Gln Gln Met Tyr Lys
1 5 10 15
Gly Phe Gln Ala Leu Gly Asp Ala Ala Asp Ile Arg Phe Val Tyr Thr
20 25 30
Pro Ala Met Glu Ser Val Cys Gly Tyr Phe His Arg Ser His Asn Arg
35 40 45
Ser Glu Glu Phe Leu Ile Ala Gly Glu Ala Pro Ser Pro Arg Pro Val
50 55 60
Pro His Gln Pro Val Pro Gly Ala Arg Pro Ser Asn His Glu Gly Ala
65 70 75 80
Arg Leu

<210> 51
<211> 115
<212> PRT
<213> Homo sapiens

<400> 51
Met Ala Pro Phe Glu Pro Leu Ala Ser Gly Ile Leu Leu Leu Leu Trp
1 5 10 15
Leu Ile Ala Pro Ser Arg Ala Cys Thr Cys Val Pro Pro His Pro Gln
20 25 30
Thr Ala Phe Cys Asn Ser Asp Leu Val Ile Arg Ala Lys Phe Val Gly
35 40 45
Thr Pro Glu Val Asn Gln Thr Thr Leu Tyr Gln Arg Tyr Glu Ile Lys
50 55 60
Met Thr Lys Met Tyr Lys Gly Phe Gln Ala Leu Gly Asp Ala Ala Asp
65 70 75 80
Ile Arg Phe Val Tyr Thr Pro Ala Met Glu Ser Val Cys Gly Tyr Phe
85 90 95
His Arg Met Asp Ser Cys Thr Ser Leu Pro Ala Val Ser Trp Leu Pro
100 105 110
Gly Thr Ala
115

<210> 52
 <211> 143
 <212> PRT
 <213> Homo sapiens

<400> 52

Met Thr Lys Met Tyr Lys Gly Phe Gln Ala Leu Gly Asp Ala Ala Asp
 1 5 10 15

Ile Arg Phe Val Tyr Thr Pro Ala Met Glu Ser Val Cys Gly Tyr Phe
 20 25 30

His Arg Ser His Asn Arg Ser Glu Phe Leu Ile Ala Gly Lys Leu
 35 40 45

Gln Asp Gly Leu Leu His Ile Thr Thr Cys Ser Phe Val Ala Pro Trp
 50 55 60

Asn Ser Leu Ser Leu Ala Gln Arg Arg Gly Phe Thr Lys Thr Tyr Thr
 65 70 75 80

Val Gly Cys Glu Glu Cys Thr Val Phe Pro Cys Leu Ser Ile Pro Cys
 85 90 95

Lys Leu Gln Ser Gly Thr His Cys Leu Trp Thr Asp Gln Leu Leu Gln
 100 105 110

Gly Ser Glu Lys Gly Phe Gln Ser Arg His Leu Ala Cys Leu Pro Arg
 115 120 125

Glu Pro Gly Leu Cys Thr Trp Gln Ser Leu Arg Ser Gln Ile Ala
 130 135 140